

Cloaked Wings



Ages: Grades 3-adult

Subjects: science, languages, arts, math, social studies, and physical education

Duration: 20-45 minutes

Group Size: 10 to 40 students or more

Setting: works best outdoors or in large room setting

Objectives

Students will learn about butterfly predators and prey relationships, and factors that influence a butterfly's ability to survive.

Method

Students play a version of freeze tag.

Background

Vocabulary:

Predator: An animal that kills and eats other animals

Prey: An animal that is killed and eaten by other animals for food.

Butterflies have a bigger job than just getting enough food to eat. In addition to their daily hunts for food, they must also dodge the critters that want to eat them, like birds, bats and even snakes.

Butterflies have many ways to outsmart their predators. They can hide in a bush, camouflage themselves by sitting on something that is similar to their coloring, or even fool their predators into thinking they are something bigger than just a pretty little butterfly.

Some butterfly species will fly into the thick branches of a nearby bush to escape birds. By sitting very still, with their wings closed, they look like a part of the bush, or a leaf. Other species hide themselves while nectaring because they are the same color as the flower they sip. Others have large spots on the outside of their wings that appear to be eyes, fooling birds into thinking they are a bird or a much larger insect themselves.

Materials

- Large playing field, gymnasium or large room
- Food tokens: poker chips work well, but so will small pieces of paper or cardboard. Enough for three per "butterfly."
- Bandanas, vests, or a piece of bright clothing to be worn by the predators
- Four or Five hula hoops

Procedure

1. Set up a large playing area (70 ft. long if possible).
2. Designate one end of the field as the butterfly "house" and one end as the "garden."
3. Place four or five hula hoops on the open area between the "house" and the "garden." These represent shelter where butterflies are safe. (If hula-hoops aren't available, you could use string or chalk outlines.)
4. Scatter food tokens on the ground at the "garden."
5. Identify your predators by giving them hats, vests, bandanas or some other form of identification. You should have one predator for every four to six butterflies. You can tell the students they are birds, snakes or bats.
6. Tell the butterflies, all standing at their "house" that they must retrieve three food tokens from the "garden," and bring them home, but only one token a trip. Their travel is difficult, though, because birds, snakes or bats might try to eat them. Butterflies have two ways to prevent being eaten by the predators. They can freeze, or they can run to the bushes (inside the hula-hoops) where they cannot be "seen" by the predators.
7. Predators can be anywhere on the field and will simply "tag" the butterflies to simulate eating them. Predators, however, cannot tag frozen butterflies, or butterflies in their "house," in the "garden," or in the "bushes."
8. Make each round of the game about five to seven minutes long (or you start losing your captured butterflies who must wait along the sidelines.) Butterflies can stay frozen as long as they'd like, but if they don't have three food tokens at the end of the activity, they will die of starvation. Explain to students that sometimes wild critters have to choose between eating and safety.
9. Play a couple rounds so others have a chance to be predators.
10. Ask the students to summarize what happened and what methods of evasion were most effective. Use this as a springboard to discuss what we can do to help butterflies survive in the wild.

Extensions

Below are some suggestions for expanding students' knowledge about butterflies.

- Explore some ideas for creating good butterfly habitat. Is it safe to have a bird feeding station near your butterfly garden?

References:

This activity adapted by Thea Miller Ryan from Project WILD activity *Quick Frozen Critters*. For more information on Project WILD, see Aquatic Guide – Copyright 1987, 1992 Council for Environmental Education. Adapted with permission from Project WILD, *Project WILD Aquatic Education Activity Guide*. The complete Activity Guide can be obtained by attending a Project WILD workshop. For more information contact the South Dakota Project WILD office at (605) 773- 2541.